

ETH  SOFT

Strategic Insights: Enhancing Decision-Making with Cloud LIMS

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Cloud LIMS

- Brief introduction of Cloud LIMS
 - Design Considerations
 - Data Ownership
- Differences between Cloud and On-Premise

On-Premise LIMS : Overview

- Overview of On-Premise hosted LIMS
 - Key Points:
 - Installed on organization's network
 - Security conforms to local policies
 - In-house IT personnel
 - Traditional licensing cost model

- Overview of Cloud hosted LIMS
 - Key Points:
 - Subscription Service over the internet
 - >99.9% uptime
 - Security options
 - Optimization of IT resources
 - Cost efficiency

Cloud Adoption

- Fastest Growing Segment of LIMS Market
- Why are Laboratories selecting Cloud?
 - Advantages: Cloud over On-Premise

Reliability of Data

- All Cloud LIMS should have...
 - >99.9% system uptime
 - Up-to date release management
 - Database backups
 - Backed up offsite
 - Backed up more frequently
- Differences between cloud vendors could affect data reliability

Cloud Security

- Security
 - Vendor Access
 - Options outside of internal IT policies
 - Quicker support
 - Isolated
 - Cloud network is separate from the lab
 - Hackers cannot get to the data if lab/municipality network is compromised
 - Cloud environment should have up-to-date security patches

Fewer IT Resources

- Little to no organizational IT resources
 - Application and database backup is vendor's responsibility
 - Organizational IT disaster recovery minimized
 - Note: IT still has disaster recovery planning
- Application Scaling
 - Allows for future lab growth

Cost Efficiency

- No server infrastructure costs
 - Hardware
 - Database and OS licensing
- Lowering investment for LIMS acquisition
- Budgeting options
 - Purchasing Department: Subscription vs. Purchase

Environmental Impact

- The Cloud is cleaner
 - Reduced electricity consumption
 - Higher server utilization
- Overall 28% reduced carbon consumption*
 - Constant investment/improvement

*Amazon Web Services 11/15/2022

Collaboration

- Cloud makes teamwork a reality
 - Data analysis across organizations
 - Security not by organizational silos
 - Single location for source data

Cloud LIMS Conclusions

- Key points:
 - Data access
 - Reliability and scalability
 - Security considerations
 - IT resources
 - Environmental impact
 - Cost efficiency

Q & A

Questions?

Comments?